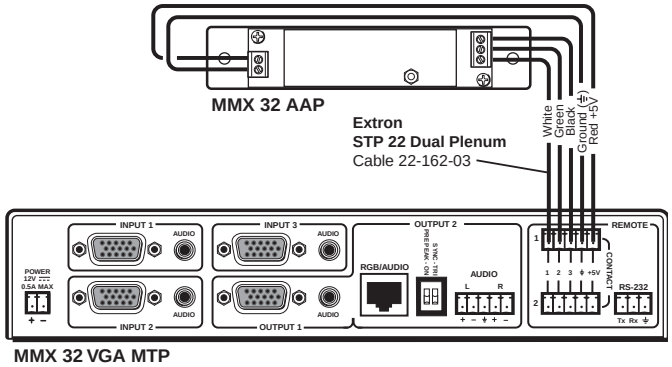
Connecting the control panel to an MMX 32 VGA MTP

NOTE *See the drawing below. The wire connected to the 5 VDC pole (④ on pages 2 and 3) should **not** be daisy chained. The power for each AAP or MAAP must come directly from the +5V connector for the appropriate output on the MMX switcher.*

NOTE *See the drawing below. The wire connected to the Ground pole (⑤ on pages 2 and 3) should **not** be shared or jumpered between two AAPs and/or MAAPs. Run a separate ground wire for each AAP and/or MAAP. Use the drain wire of the cable for ground.*

NOTE *The drawing below shows a control panel wired to select the input tied to MMX 32 VGA MTP output 1, using the Remote 1 captive screw connector. To select the input tied to output 2, use the Remote 2 captive screw connector.*



Wiring diagram for a typical MMX 32 VGA MTP application

Recommended Cables

STP22P 1000' (305 m) Dual Plenum in self-dispensing box	22-162-03
STP22 1000' (305 m) Dual in self-dispensing box	22-160-03

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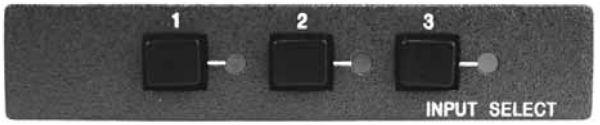
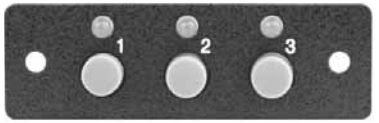
Installation Guide





MMX 32 AAP and MMX 32 MAAP

Contact Closure Control Panels for the MMX 32 VGA A Mini Matrix Switcher

68-881-01 **Rev. C**
11 05

Installation

This guide describes how to connect the Extron MMX 32 architectural adapter plate (AAP) or MMX 32 mini architectural adapter plate (MAAP) to the MMX 32 VGA A and MMX 32 VGA MTP matrix switchers.

NOTE *In this manual, the term "switcher" refers to either the MMX 32 VGA A or the MMX 32 VGA MTP. Where differences exist, this manual refers to a specific model by name.*

Contact Closure Control

Each Extron MMX 32 AAP and MMX 32 MAAP remote control panel selects the input for one switcher output via contact closure.

The contact closure system uses the pins on the switcher's Remote connector(s) that are not assigned to RS-232 control. Each contact closure pin corresponds to an input / output connection, or tie. A tie is made when one pin is connected to ground.

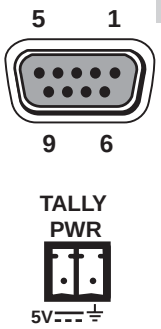
Each pin returns a tally out signal to the remote control panel after a tie is made, lighting the control panel LED corresponding to the selected input. Power to light the LEDs is provided via the switcher's Tally Power (MMX 32 VGA A) or +5V (MMX 32 VGA MTP) connector(s).

NOTE *The **MMX 32 VGA MTP** uses a separate 5-pin captive screw connector for contact closure input selection for output 1 and for output 2. The pin assignments are clearly marked on the MMX 32 VGA MTP.*
*The **MMX 32 VGA A** uses a DB-9 connector for the connections (see* MMX 32 VGA A pin assignments *below).*

MMX 32 VGA A pin assignments

The table below shows the contact closure pin assignments for the MMX 32 VGA A.

NOTE *For contact closure **do not** use pins 2 or 3.*

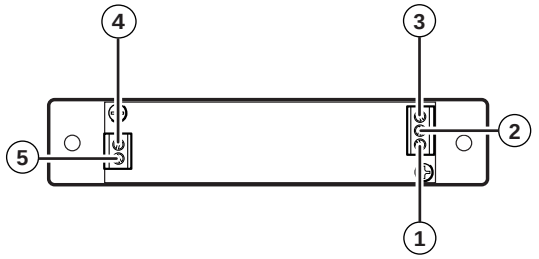


Pin	Contact closure	RS-232	Function
1	Out #1 / In #1	—	Tie input 1 to output 1
2	—	TX	Transmit data
3	—	RX	Receive data
4	Out #1 / In #2	—	Tie input 2 to output 1
5	Gnd	Gnd	Signal ground
6	Out #1 / In #3	—	Tie input 3 to output 1
7	Out #2 / In #1	—	Tie input 1 to output 2
8	Out #2 / In #2	—	Tie input 2 to output 2
9	Out #2 / In #3	—	Tie input 3 to output 2

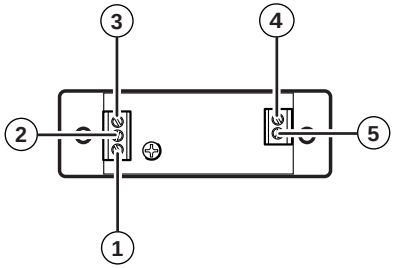
MMX 32 VGA A Remote and Tally Power connectors

Control Panel Connections

To connect a panel to the switcher's Remote and Tally Power connectors, wire the captive screw connectors on the rear of the panel as follows.



MMX 32 AAP rear panel



MMX 32 MAAP rear panel

NOTE *The wire connected to the 5 VDC pole (④) should **not** be daisy chained. The power for each AAP or MAAP must come directly from the Tally Power 5V connector on the MMX 32 VGA A switcher or the +5V connector for the appropriate output on the MMX 32 VGA MTP switcher.*

Input selection connector

① **Input 1 pole —** Connect this pole of the captive screw connector to the appropriate connector on the connected switcher:

- **MMX 32 VGA A —** Remote connector, pin 1 (to control input selection for output 1) or pin 7 (for output 2)
- **MMX 32 VGA MTP —** Contact 1 pin 1 (to control input selection for output 1) or Contact 2 pin 1 (for output 2)

② **Input 2 pole —** Connect this pole of the captive screw connector to the appropriate connector on the connected switcher:

- **MMX 32 VGA A —** Remote connector, pin 4 (to control input selection for output 1) or pin 8 (for output 2)
- **MMX 32 VGA MTP —** Contact 1 pin 2 (to control input selection for output 1) or Contact 2 pin 2 (for output 2)

③ **Input 3 pole —** Connect this pole of the captive screw connector to the appropriate connector on the connected switcher:

- **MMX 32 VGA A —** Remote connector, pin 6 (to control input selection for output 1) or pin 9 (for output 2)
- **MMX 32 VGA MTP —** Contact 1 pin 3 (to control input selection for output 1) or Contact 2 pin 3 (for output 2)

Tally Power Connector

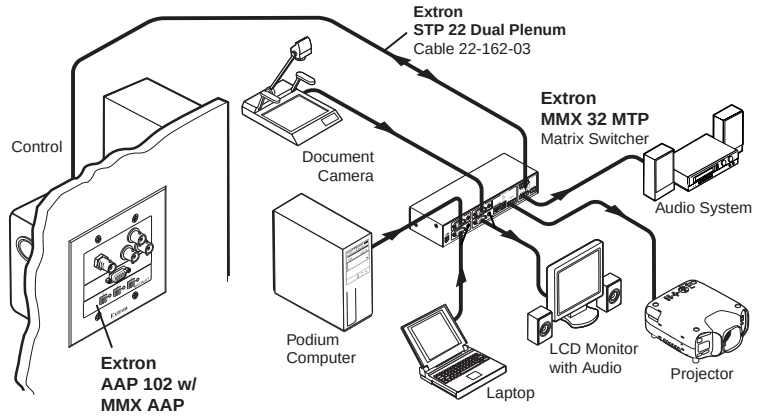
④ **5 VDC pole —** Connect this pole of the captive screw connector to the appropriate connector on the connected switcher:

- **MMX 32 VGA A —** Tally Power connector, 5V pole
- **MMX 32 VGA MTP —** Contact connector, +5V pole for the appropriate output.

⑤ **Ground pole —** Connect this pole of the captive screw connector to the appropriate connector on the connected switcher:

- **MMX 32 VGA A —** Tally Power connector, ground pole
- **MMX 32 VGA MTP —** Contact connector, ground pole for the appropriate output.

Connecting the Control Panel to the Switcher



Typical MMX 32 VGA MTP / control panel application

NOTE *Only one MMX 32 AAP or MMX 32 MAAP control panel can be used to control each output.*

NOTE

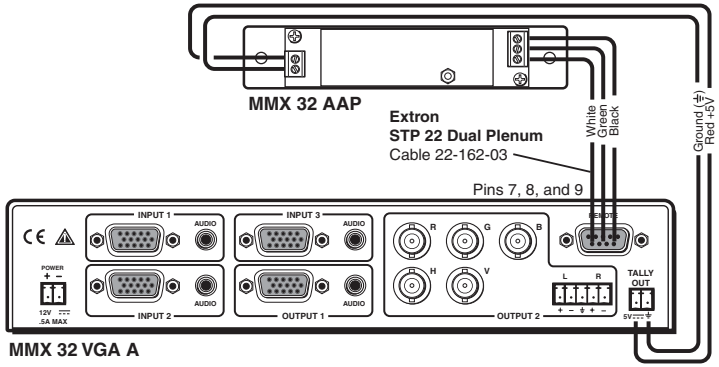
Extron recommends shielded twisted pair cable, such as STP 22 Dual Plenum cable, part #22-162-03 (or equivalent), for the connection between the control panel and the switcher. Unshielded cable can allow crosstalk and interference between the MMX and the control panel.

Connecting the control panel to an MMX 32 VGA A

NOTE *See the drawing below. The wire connected to the 5 VDC pole (④ on pages 2 and 3) should **not** be daisy chained. The power for each AAP or MAAP must come directly from the Tally Power connector on the MMX switcher.*

NOTE *See the drawing below. The wire connected to the Ground pole (⑤ on pages 2 and 3) should **not** be shared or jumpered between two AAPs and/or MAAPs. Run a separate ground wire for each AAP and/or MAAP. Use the drain wire of the cable for ground.*

NOTE *The drawing below shows a control panel wired to select the input tied to MMX 32 VGA A output 2, using pins 7, 8, and 9 on the Remote connector. To select the input tied to output 1, use pins 1, 4, and 6 on the Remote connector.*



Wiring diagram for a typical MMX 32 VGA A application